Express Mail Label No.: EL 640 011 422 US

IN THE U.S. PATENT AND TRADEMARK OFFICE

May 23, 2001

Applicants

: Yoshihiko GOTOH et al

For

: METHOD FOR MANUFACTURING QUARTZ GLASS INGOT

AND A MANUFACTURING APPARATUS

Atty. Docket No.: Ishii Case 17

Assistant Commissioner for Patents

Washington, DC 20231

PRELIMINARY AMENDMENT CANCELING CLAIMS

Sir:

Prior to calculation of the filing fee in the aboveidentified application, kindly enter the following:

IN THE CLAIMS

Please amend Claims 4, 7, 8 and 12 as shown on the attached marked-up page. Pursuant to 37 CFR § 1.121, a replacement page showing the amended claims in clean form is also attached.

REMARKS

This amendment cancels claims to reduce the filing fee.

Please enter this amendment before calculating the filing fee.

Respectfully submitted,

Terrience F. Chapman

TFC/smd

Req. No. 24 323 Dale H. Thiel FLYNN, THIEL, BOUTELL Reg. No. 25 072 David G. Boutell & TANIS, P.C. Reg. No. 22 724 Ronald J. Tanis 2026 Rambling Road Reg. No. 32 549 Kalamazoo, MI 49008-1699 Terryence F. Chapman Reg. No. 36 589 Mark L. Maki Phone: (616) 381-1156 Req. No. 31 257 David S. Goldenberg (616) 381-5465 Fax: Sidney B. Williams, Jr. Reg. No. 24 949 Reg. No. 40 694 Liane L. Churney Reg. No. 36 328 Brian R. Tumm Req. No. 44 621 Tricia R. Cobb

Encl: None

- 4. (Amended) The quartz glass ingot manufacturing apparatus of claim $2-\mathrm{or}\ 3$, wherein the furnace bed being covered with a layer of zirconia particles.
- 7. (Amended) The method of manufacturing an elongated quartz glass ingot of claim 5 or 6, wherein laying a quartz glass plate between the furnace bed and the nozzle, thereby sealing the nozzle from the atmosphere of the furnace.
- 8. (Amended) The method for manufacturing an elongated quartz glass ingot of any one of claim 5 to 7Claim 5, wherein the nozzle being projected to inside of the furnace.
- 12. (Amended) The quartz glass burner firfor manufacturing a quartz glass ingot of claim 10 or 11, wherein the oxygen gas nozzles being arranged noncircular and equidistantly and a part of the hydrogen gas being introduced between the oxygen gas nozzles.

- 4. (Amended) The quartz glass ingot manufacturing apparatus of claim 2, wherein the furnace bed being covered with a layer of zirconia particles.
- 7. (Amended) The method of manufacturing an elongated quartz glass ingot of claim 5, wherein laying a quartz glass plate between the furnace bed and the nozzle, thereby sealing the nozzle from the atmosphere of the furnace.
- 8. (Amended) The method for manufacturing an elongated quartz glass ingot of Claim 5, wherein the nozzle being projected to inside of the furnace.
- 12. (Amended) The quartz glass burner for manufacturing a quartz glass ingot of claim 10, wherein the oxygen gas nozzles being arranged noncircular and equidistantly and a part of the hydrogen gas being introduced between the oxygen gas nozzles.